

Search

(FILE 'HOME' ENTERED AT 13:14:13 ON 13 JUN 2005)

FILE 'CAPLUS, WPIX, USPATFULL, USPAT2, JAPIO' ENTERED AT 13:16:09 ON 13 JUN 2005

		E YAMANOUCHI J/AU		
L1	126	SEA ABB=ON PLU=ON	"YAMANOUCHI J"/AU OR "YAMANOUCHI JUNICHI"/A	
		U		
L2	74	SEA ABB=ON PLU=ON	"YAMANOUCHI J"/AU OR "YAMANOUCHI JUNICHI"/A	
		U		
L3	71	SEA ABB=ON PLU=ON	"YAMANOUCHI J"/AU OR "YAMANOUCHI JUNICHI"/A	
		U		
L4	10	SEA ABB=ON PLU=ON	"YAMANOUCHI J"/AU OR "YAMANOUCHI JUNICHI"/A	
		U		
L5	278	SEA ABB=ON PLU=ON	"YAMANOUCHI J"/AU OR "YAMANOUCHI JUNICHI"/A	
		U		
		TOTAL FOR ALL FILES		
L6	559	SEA ABB=ON PLU=ON	"YAMANOUCHI J"/AU OR "YAMANOUCHI JUNICHI"/A	
		U		
		E ISHIZUKA T/AU		
L7	123	SEA ABB=ON PLU=ON	"ISHIZUKA T"/AU	
L8	135	SEA ABB=ON PLU=ON	"ISHIZUKA T"/AU	
L9	0	SEA ABB=ON PLU=ON	"ISHIZUKA T"/AU	
L10	0	SEA ABB=ON PLU=ON	"ISHIZUKA T"/AU	
L11	0	SEA ABB=ON PLU=ON	"ISHIZUKA T"/AU	
		TOTAL FOR ALL FILES		
L12	258	SEA ABB=ON PLU=ON	"ISHIZUKA T"/AU	
		E ISHIZUKA TAKAHIRO/AU		
L13	109	SEA ABB=ON PLU=ON	"ISHIZUKA TAKAHIRO"/AU	
L14	0	SEA ABB=ON PLU=ON	"ISHIZUKA TAKAHIRO"/AU	
L15	27	SEA ABB=ON PLU=ON	"ISHIZUKA TAKAHIRO"/AU	
L16	7	SEA ABB=ON PLU=ON	"ISHIZUKA TAKAHIRO"/AU	
L17	99	SEA ABB=ON PLU=ON	"ISHIZUKA TAKAHIRO"/AU	
		TOTAL FOR ALL FILES		
L18	242	SEA ABB=ON PLU=ON	"ISHIZUKA TAKAHIRO"/AU	
		E YABUKI Y/AU		
L19	11	SEA ABB=ON PLU=ON	"YABUKI Y"/AU	
L20	134	SEA ABB=ON PLU=ON	"YABUKI Y"/AU	
L21	0	SEA ABB=ON PLU=ON	"YABUKI Y"/AU	
L22	0	SEA ABB=ON PLU=ON	"YABUKI Y"/AU	
L23	0	SEA ABB=ON PLU=ON	"YABUKI Y"/AU	
		TOTAL FOR ALL FILES		
L24	145	SEA ABB=ON PLU=ON	"YABUKI Y"/AU	
		E YABUKI YOSHIHARU/AU		
L25	207	SEA ABB=ON PLU=ON	"YABUKI YOSHIHARU"/AU	
L26	0	SEA ABB=ON PLU=ON	"YABUKI YOSHIHARU"/AU	
L27	89	SEA ABB=ON PLU=ON	"YABUKI YOSHIHARU"/AU	
L28	16	SEA ABB=ON PLU=ON	"YABUKI YOSHIHARU"/AU	
L29	224	SEA ABB=ON PLU=ON	"YABUKI YOSHIHARU"/AU	
		TOTAL FOR ALL FILES		
L30	536	SEA ABB=ON PLU=ON	"YABUKI YOSHIHARU"/AU	
L31	552	SEA ABB=ON PLU=ON	L1 OR L7 OR L13 OR L19 OR L25	
L32	331	SEA ABB=ON PLU=ON	L2 OR L8 OR L14 OR L20 OR L26	
L33	175	SEA ABB=ON PLU=ON	L3 OR L9 OR L15 OR L21 OR L27	
L34	28	SEA ABB=ON PLU=ON	L4 OR L10 OR L16 OR L22 OR L28	
L35	576	SEA ABB=ON PLU=ON	L5 OR L11 OR L17 OR L23 OR L29	
		TOTAL FOR ALL FILES		
L36	1662	SEA ABB=ON PLU=ON	L6 OR L12 OR L18 OR L24 OR L30	
L37	1309	DUP REM L36	(353 DUPLICATES REMOVED)	
L38	552	SEA L37		
L39	116	SEA ABB=ON PLU=ON	L38 AND (INKJET? OR INK-JET? OR (INK	
			JET?))	

L40	192	SEA L37		
L41	6	SEA ABB=ON	PLU=ON	L40 AND (INKJET? OR INK-JET? OR (INK JET?))
L42	152	SEA L37		
L43	32	SEA ABB=ON	PLU=ON	L42 AND (INKJET? OR INK-JET? OR (INK JET?))
L44	1	SEA L37		
L45	0	SEA ABB=ON	PLU=ON	L44 AND (INKJET? OR INK-JET? OR (INK JET?))
L46	412	SEA L37		
L47	109	SEA ABB=ON	PLU=ON	L46 AND (INKJET? OR INK-JET? OR (INK JET?))
TOTAL FOR ALL FILES				
L48	263	SEA ABB=ON	PLU=ON	L37 AND (INKJET? OR INK-JET? OR (INK JET?))
L49	10	SEA ABB=ON	PLU=ON	L39 AND (OXIDATION POTENTIAL?)
L50	3	SEA ABB=ON	PLU=ON	L41 AND (OXIDATION POTENTIAL?)
L51	12	SEA ABB=ON	PLU=ON	L43 AND (OXIDATION POTENTIAL?)
L52	0	SEA ABB=ON	PLU=ON	L45 AND (OXIDATION POTENTIAL?)
L53	9	SEA ABB=ON	PLU=ON	L47 AND (OXIDATION POTENTIAL?)
TOTAL FOR ALL FILES				
L54	34	SEA ABB=ON	PLU=ON	L48 AND (OXIDATION POTENTIAL?)
L55	34	FOCUS L54 1-		
		D 1-34 BIB AB		

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# Search

FILE 'STNGUIDE' ENTERED AT 17:35:58 ON 13 JUN 2005

FILE 'CAPLUS' ENTERED AT 17:36:36 ON 13 JUN 2005

L1 25497 SEA ABB=ON PLU=ON (INKJET? OR INK-JET? OR (INK JET?))  
L2 260 SEA ABB=ON PLU=ON L1 AND ((OIL SOLUBLE?) OR OIL-SOLUBLE? OR  
HYDROPHOBIC?) (5A) DYE?)  
L3 21 SEA ABB=ON PLU=ON L1 AND (DYE (5A) (OXIDATION POTENTIAL?))  
L4 1 SEA ABB=ON PLU=ON L2 AND L3  
D ALL RN  
L5 20 SEA ABB=ON PLU=ON L3 NOT L4  
L6 20 FOCUS L5 1-  
L7 20 SEA ABB=ON PLU=ON L3 NOT L4  
L8 1 SEA ABB=ON PLU=ON L7 AND (PARTIC?)  
D ALL  
L9 19 SEA ABB=ON PLU=ON L7 NOT L8  
L10 19 FOCUS L9 1-  
D 1-19 ALL RN  
L11 1 SEA ABB=ON PLU=ON L3 AND ?INITIA?  
D ALL

FILE 'USPATFULL, USPAT2' ENTERED AT 17:46:44 ON 13 JUN 2005

L12 48 SEA ABB=ON PLU=ON L2 AND L3  
L13 6 SEA ABB=ON PLU=ON L2 AND L3  
TOTAL FOR ALL FILES  
L14 54 SEA ABB=ON PLU=ON L4  
L15 39 SEA ABB=ON PLU=ON L12 AND ?INITIA?  
L16 5 SEA ABB=ON PLU=ON L13 AND ?INITIA?  
TOTAL FOR ALL FILES  
L17 44 SEA ABB=ON PLU=ON L14 AND ?INITIA?  
L18 39 SEA ABB=ON PLU=ON L15 AND PARTIC?  
L19 5 SEA ABB=ON PLU=ON L16 AND PARTIC?  
TOTAL FOR ALL FILES  
L20 44 SEA ABB=ON PLU=ON L17 AND PARTIC?  
L21 44 FOCUS L20 1-  
D 1-44 BIB AB

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FILE 'WPIX, JAPIO' ENTERED AT 18:12:35 ON 13 JUN 2005

L53 61351 SEA ABB=ON PLU=ON (INKJET? OR INK-JET? OR (INK JET?))  
L54 44324 SEA ABB=ON PLU=ON (INKJET? OR INK-JET? OR (INK JET?))  
TOTAL FOR ALL FILES  
L55 105675 SEA ABB=ON PLU=ON (INKJET? OR INK-JET? OR (INK JET?))  
L56 356 SEA ABB=ON PLU=ON L53 AND (((OIL SOLUBLE?) OR OIL-SOLUBLE?  
OR HYDROPHOBIC?) (5A) DYE?)  
L57 198 SEA ABB=ON PLU=ON L54 AND (((OIL SOLUBLE?) OR OIL-SOLUBLE?  
OR HYDROPHOBIC?) (5A) DYE?)  
TOTAL FOR ALL FILES  
L58 554 SEA ABB=ON PLU=ON L55 AND (((OIL SOLUBLE?) OR OIL-SOLUBLE?  
OR HYDROPHOBIC?) (5A) DYE?)  
L59 79 SEA ABB=ON PLU=ON L53 AND (DYE? (5A) (OXIDATION POTENTIAL?))  
L60 13 SEA ABB=ON PLU=ON L54 AND (DYE? (5A) (OXIDATION POTENTIAL?))  
TOTAL FOR ALL FILES  
L61 92 SEA ABB=ON PLU=ON L55 AND (DYE? (5A) (OXIDATION POTENTIAL?))  
L62 4 SEA ABB=ON PLU=ON L56 AND L59  
L63 0 SEA ABB=ON PLU=ON L57 AND L60  
TOTAL FOR ALL FILES  
L64 4 SEA ABB=ON PLU=ON L58 AND L61  
D 1-4 ALL  
L65 2 SEA ABB=ON PLU=ON L62 AND ?INITIA?  
L66 0 SEA ABB=ON PLU=ON L63 AND ?INITIA?  
TOTAL FOR ALL FILES  
L67 2 SEA ABB=ON PLU=ON L64 AND ?INITIA?  
D 1-2 ALL

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FILE 'REGISTRY' ENTERED AT 17:54:12 ON 13 JUN 2005

L1	1	SEA ABB=ON	PLU=ON	414909-46-9
L2	1	SEA ABB=ON	PLU=ON	473465-57-5
L3	1	SEA ABB=ON	PLU=ON	698980-77-7
L4	1	SEA ABB=ON	PLU=ON	698980-82-4

FILE 'CAPLUS' ENTERED AT 17:55:20 ON 13 JUN 2005

L5	20	SEA ABB=ON	PLU=ON	L1
L6	8	SEA ABB=ON	PLU=ON	L2
L7	1	SEA ABB=ON	PLU=ON	L3
L8	1	SEA ABB=ON	PLU=ON	L4
L9	25	SEA ABB=ON	PLU=ON	L5 OR L6 OR L7 OR L8

FILE 'USPATFULL, USPAT2' ENTERED AT 17:55:54 ON 13 JUN 2005

L10	9	SEA ABB=ON	PLU=ON	L1
L11	1	SEA ABB=ON	PLU=ON	L1

TOTAL FOR ALL FILES

L12	10	SEA ABB=ON	PLU=ON	L1
L13	3	SEA ABB=ON	PLU=ON	L2
L14	1	SEA ABB=ON	PLU=ON	L2

TOTAL FOR ALL FILES

L15	4	SEA ABB=ON	PLU=ON	L2
L16	1	SEA ABB=ON	PLU=ON	L3
L17	0	SEA ABB=ON	PLU=ON	L3

TOTAL FOR ALL FILES

L18	1	SEA ABB=ON	PLU=ON	L3
L19	1	SEA ABB=ON	PLU=ON	L4
L20	0	SEA ABB=ON	PLU=ON	L4

TOTAL FOR ALL FILES

L21	1	SEA ABB=ON	PLU=ON	L4
L22	10	SEA ABB=ON	PLU=ON	(L10 OR L13 OR L16 OR L19)
L23	2	SEA ABB=ON	PLU=ON	(L11 OR L14 OR L17 OR L20)

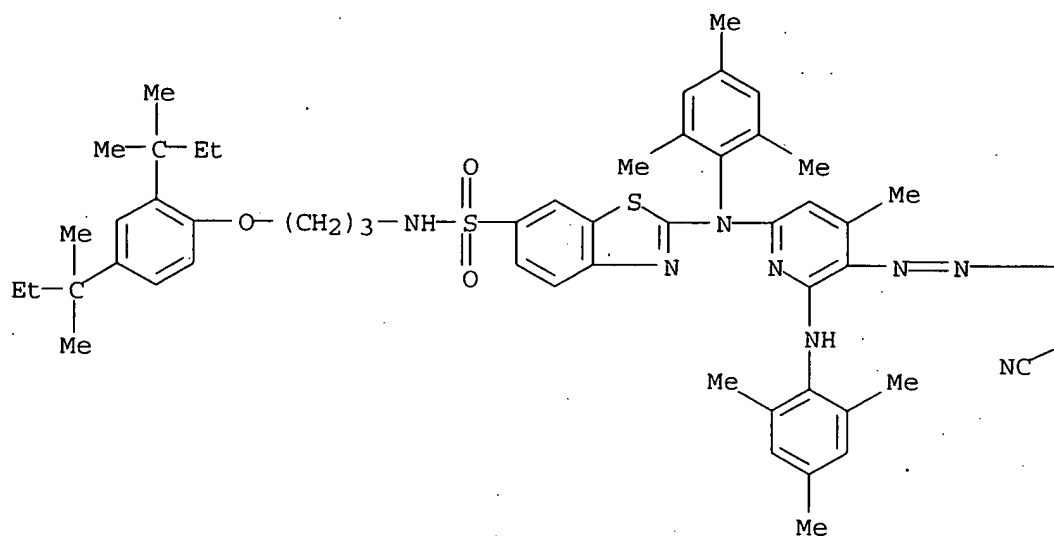
TOTAL FOR ALL FILES

L24	12	SEA ABB=ON	PLU=ON	(L12 OR L15 OR L18 OR L21)
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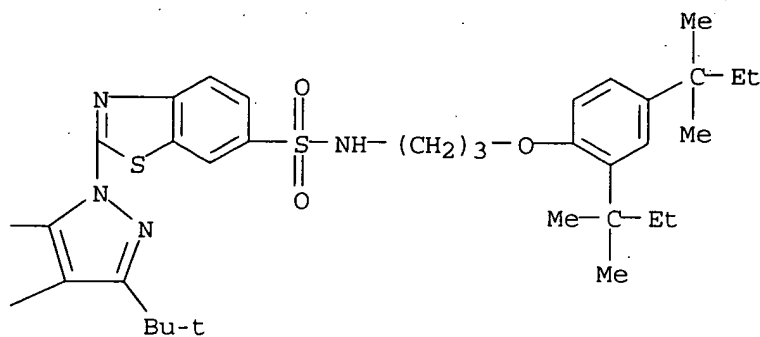
=>

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 414909-46-9 REGISTRY  
 ED Entered STN: 13 May 2002  
 CN 6-Benzothiazolesulfonamide, N-[3-[2,4-bis(1,1-dimethylpropyl)phenoxy]propyl]-2-[[5-[[1-[6-[[[3-[2,4-bis(1,1-dimethylpropyl)phenoxy]propyl]amino]sulfonyl]-2-benzothiazolyl]-4-cyano-3-(1,1-dimethylethyl)-1H-pyrazol-5-yl]azo]-4-methyl-6-[(2,4,6-trimethylphenyl)amino]-2-pyridinyl](2,4,6-trimethylphenyl)amino]- (9CI)  
 (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C84 H106 N12 O6 S4  
 SR CA  
 LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

PAGE 1-A



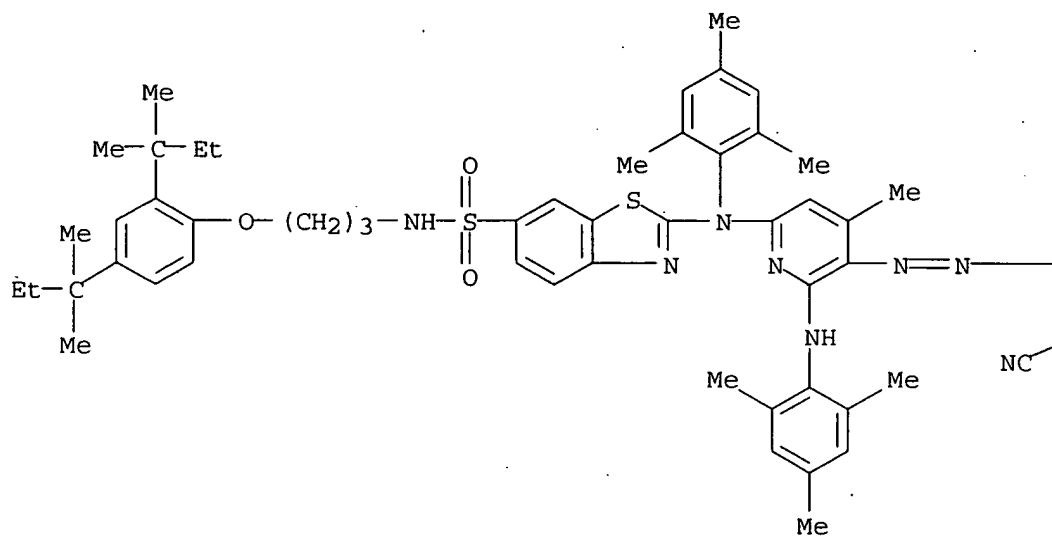
PAGE 1-B



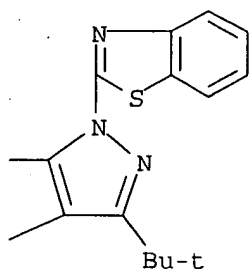
20 REFERENCES IN FILE CA (1907 TO DATE)  
 20 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 473465-57-5 REGISTRY  
 ED Entered STN: 13 Nov 2002  
 CN 6-Benzothiazolesulfonamide, 2-[[5-[[1-(2-benzothiazolyl)-4-cyano-3-(1,1-dimethylethyl)-1H-pyrazol-5-yl]azo]-4-methyl-6-[(2,4,6-trimethylphenyl)amino]-2-pyridinyl](2,4,6-trimethylphenyl)amino]-N-[3-[2,4-bis(1,1-dimethylpropyl)phenoxy]propyl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C65 H75 N11 O3 S3  
 SR CA  
 LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

PAGE 1-A



PAGE 1-B

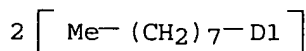
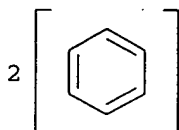


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

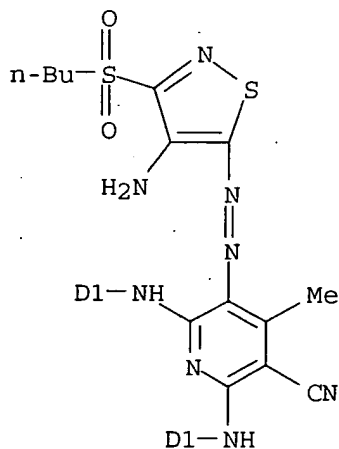
8 REFERENCES IN FILE CA (1907 TO DATE)  
 8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 698980-77-7 REGISTRY  
 ED Entered STN: 25 Jun 2004  
 CN 3-Pyridinecarbonitrile, 5-[[4-amino-3-(butylsulfonyl)-5-isothiazolyl]azo]-  
 4-methyl-2,6-bis[[2(or 4)-octylphenyl]amino]- (9CI) (CA INDEX NAME)  
 MF C42 H58 N8 O2 S2  
 CI IDS  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 2-A



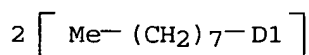
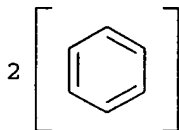
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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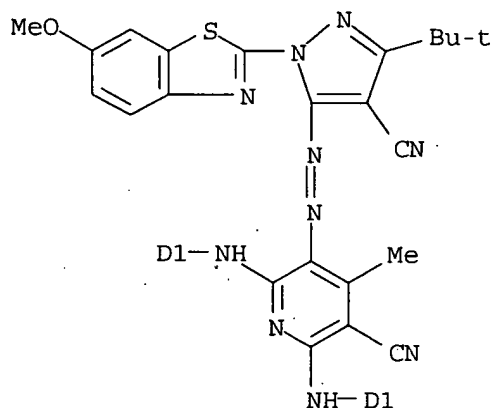


L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 698980-82-4 REGISTRY  
 ED Entered STN: 25 Jun 2004  
 CN 3-Pyridinecarbonitrile, 5-[[4-cyano-3-(1,1-dimethylethyl)-1-(6-methoxy-2-benzothiazolyl)-1H-pyrazol-5-yl]azo]-4-methyl-2,6-bis[[2(or 4)-octylphenyl]amino]- (9CI) (CA INDEX NAME)  
 MF C51 H62 N10 O S  
 CI IDS  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 2-A



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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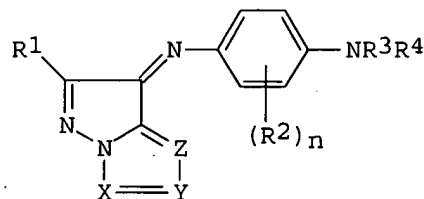
L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1992:61766 CAPLUS  
 DN 116:61766  
 ED Entered STN: 21 Feb 1992  
 TI Jet-printing inks containing condensed pyrazole derivatives as magenta coloring agents  
 IN Tanaka, Mitsugi; Mikoshiba, Takashi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 29 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41M005-00; C09D011-02  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 41, 74  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03231975	A2	19911015	JP 1990-26406	19900206 <--
PRAI	JP 1990-26406		19900206		

# CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 03231975	ICM	C09D011-00
	ICS	B41M005-00; C09D011-02

OS MARPAT 116:61766  
 GI



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AB Coloring agents are I, where R1, R2 = H, halogen, alkyl, cycloalkyl, alkoxy, aryl, aryloxy, or alkyl, cyano, acylamino, sulfonylamino, ureido, alkylthio, arylthio, alkoxycarbonyl, carbamoyl, sulfamoyl, sulfonyl, acyl, amino groups, R3, R4 = H, alkyl, cycloalkyl, or alkyl, aryl, R3 and R4, R2 and R3, or R2 and R4 optionally form rings, n = 0-3 integer, X, Y, and Z = CR5 or N, R5 = H, alkyl, cycloalkyl, or alkyl, aryl, alkoxy, aryloxy, amino, heterocyclic, when X, Y = CR5 or Y, Z = CR5, optionally form saturated or unsatd. carbon rings. Thus, an ink contained I (R1 = tert-Bu, R2 = H, R3 = C2H4CN, R4 = Et, X, Z = N, Y = CMe) 6, di-Et phthalate 30, diisopropyl adipate 44, and N,N-diethyldodecanamide 20 parts.

ST dipyrazole jet printing ink; condensed pyrazole dye ink  
 IT Dyes  
 (magenta, condensed pyrazole derivs., for jet-printing inks)  
 IT Inks  
 (jet-printing, magenta dyes for, condensed pyrazole derivs. as)  
 IT 136640-16-9 138686-44-9 138686-45-0 138686-46-1 138686-47-2  
 138686-48-3 138686-49-4 138805-91-1 138805-92-2 138805-93-3  
 138805-94-4  
 RL: TEM (Technical or engineered material use); USES (Uses)

(dyes, for jet-printing inks)

IT 89929-65-7 109823-00-9 123633-02-3  
 RL: USES (Uses)  
 (jet-printing inks containing dyes of condensed pyrazole derivs. and)

RN 136640-16-9  
 RN 138686-44-9  
 RN 138686-45-0  
 RN 138686-46-1  
 RN 138686-47-2  
 RN 138686-48-3  
 RN 138686-49-4  
 RN 138805-91-1  
 RN 138805-92-2  
 RN 138805-93-3  
 RN 138805-94-4  
 RN 89929-65-7  
 RN 109823-00-9  
 RN 123633-02-3

L4 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN  
 AN 1991-344768 [47] WPIX  
 DNN N1991-263833 DNC C1991-148821  
 TI Ink jet recording method giving images of good hue - using ink containing pyrazole-containing magenta dye.  
 DC A82 E23 G02 P75  
 PA (FUJF) FUJI PHOTO FILM CO LTD  
 CYC 1  
 PI JP 03231975 A 19911015 (199147)\* <--  
 ADT JP 03231975 A JP 1990-26406 19900206  
 PRAI JP 1990-26406 19900206  
 IC B41M005-00; C09D011-00  
 AB JP 03231975 A UPAB: 19930928  
 In an ink jet recording method where ink is sprayed on an image-forming material in droplets to record images on it, the improvement which comprises that the ink contains a dye(s) of formula (I), where each R1-2=H, halogen, alkyl, cyaloalkyl, alkoxy, aryl, aryloxy, aralkyl, cyano, acylamino, sulphonylamino, ureide, alkylthio, arylthio, alkoxycarbonyl, carbamoyl, sulphamoyl, sulphonyl, acyl or amino, each R3-4=H, alkyl, cycloalkyl, aralkyl or aryl, each R3 and 4, R2 and 3 and 4 can bond with each other to form a ring, =an integer of 0-3, each X, Y and Z=(a) or N, R5=H, alkyl, cycloalkyl, aralkyl, aryl, a heterocyclic ring, alkoxy, aryloxy or amino and, when X=Y=(a) or Y=Z=(a), each (X and Y) and (Y and Z) can bond with each other to form a saturated or unsatd. carbon ring.  
 Oxidation coupling of cpds. (II) and (III) gives a cpd. of formula (I).  
 USE/ADVANTAGE - The recording method is capable of giving printed images containing magenta dye(s) of formula (I) with excellent hue. The solvent is water and/or organic solvents.  
 0/0

FS CPI GMPI  
 FA AB; GI; DCN  
 MC CPI: A12-W07F; E25-C; G02-A04B; G05-F

L4 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN  
 AN 1991-231975 JAPIO  
 TI INK JET RECORDING METHOD  
 IN TANAKA MITSUGI; MIKOSHIBA TAKASHI  
 PA FUJI PHOTO FILM CO LTD  
 PI JP 03231975 A 19911015 Heisei  
 AI JP 1990-26406 (JP02026406 Heisei) 19900206  
 PRAI JP 1990-26406 19900206  
 SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1991  
 IC ICM C09D011-00

ICS B41M005-00; C09D011-02

AB PURPOSE: To obtain fuchsine-containing printed images with favorable hue by spraying in the form of droplets a recording liquid containing a specific coloring matter.

CONSTITUTION: Printed images are recorded on an image-receiving material by spraying in the form of droplets a recording liquid containing a coloring matter of formula I [R<sub>1</sub> and R<sub>2</sub> are each H, halogen, alkyl, cycloalkyl, aryl, carbamoyl, sulfonyl, acyl, etc.; R<sub>3</sub> and R<sub>4</sub> are each H, alkyl, cycloalkyl, aryl, etc.; n is 0-3; X, Y and Z are each of formula II (R<sub>5</sub> is H, alkyl, cycloalkyl, aryl, heterocycle, amino, etc.) or N] (e.g. a compound of formula III).

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L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1992:653582 CAPLUS  
 DN 117:253582  
 ED Entered STN: 26 Dec 1992  
 TI Inks for jet printing and fixing method therefor  
 IN Tsujihiro, Masaki  
 PA Mita Industrial Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41J002-01; C09D011-02  
 CC 42-12 (Coatings, Inks, and Related Products)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04185672 ✓	A2	19920702	JP 1990-317069	19901120 <--
PRAI	JP 1990-317069		19901120		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 04185672 ✓	ICM	C09D011-00
	ICS	B41J002-01; C09D011-02

AB Jet-printing inks giving abrasion- and smudge-resistant images contain aqueous media (A), colored resin particles (B) with  $\leq 204$  difference between sp. d. of A and sp. d. of B, and water-soluble compds. and are fixed by heat treatment after forming images. Thus,  $\text{Ca}_3(\text{PO}_4)_2$  1, 8% aqueous NaCl solution

(d. 1.05) 90, and black polystyrene particles (d. 1.05) 10 g were dispersed to give an ink with storage stability .apprx.24 h, which was used in jet printing to form smudge-resistant images.

ST jet printing ink heat fixing; colored polymer particle jet ink; smudge resistance black polystyrene ink; wear resistance black polystyrene ink

IT Dispersing agents

(aqueous jet inks containing colored resin particles and, heat-fixable, smudge- and wear-resistant)

IT Inks

(jet-printing, aqueous, colored resin particle-containing, with water-soluble compound or dispersant, heat-fixable)

IT 7758-87-4, Tricalcium phosphate 9002-89-5, Poly(vinyl alcohol) 25155-30-0, Sodium dodecylbenzenesulfonate

RL: USES (Uses)

(aqueous jet inks containing colored resin particles and, heat-fixable, smudge- and wear-resistant)

IT 9003-53-6, Polystyrene 95890-94-1, Divinylbenzene-2-ethylhexyl methacrylate-styrene copolymer

RL: USES (Uses)

(black particles, aqueous jet inks containing, with water-soluble compds. or dispersants, heat-fixable, smudge- and wear-resistant)

IT 7647-14-5, Sodium chloride, uses

RL: USES (Uses)

(dispersants, for colored resin particles, as jet-printing inks, heat-fixable)

RN 7758-87-4

RN 9002-89-5

RN 25155-30-0

RN 9003-53-6

RN 95890-94-1  
RN 7647-14-5

L8 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 1992-272920 [33] WPIX

DNN N1992-208791 DNC C1992-121294

TI Ink compsn. for jet printer giving high density water resistance etc.,  
images - contains coloured resin particles and aqueous medium dispersing the  
particles opt. containing dispersion stabiliser or other water soluble cpds..

DC A97 G02 G05 P75

PA (MITA) MITSUI & CO LTD

CYC 1

PI JP 04185672 A 19920702 (199233)\* 9 C09D011-00 <--

ADT JP 04185672 A JP 1990-317069 19901120

PRAI JP 1990-317069 19901120

IC B41J002-01; C09D011-02

AB JP 04185672 A UPAB: 19931025

In an ink compsn. contains (A) coloured resin particles and (B) an aqueous  
medium which can disperse (A). (B) dissolves (C) water-soluble cpd(s). so  
that a difference between specific gravities of (A) and (B) is less than  
0.04, or (B) contains (D) water-soluble dispersion stabiliser which can  
disperse (A).

A method for fixing this ink compsn. comprises (I) forming printed  
images on the recording paper by projecting the ink compsn. containing  
dispersed (A) having a glass transition temperature of 10-200 deg.C in (B) from  
a nozzle of an ink jet printer; and (II) fixing the printed images by  
melting (A) by heating the printed images.

(A) has pref. a median dia. of 0.01-20(0.05-5) microns and is  
composed of 0.1-20(1-10)weight% of water-insoluble dye(s) and the balance at  
least one of polyolefins, polystyrenes, polyacrylates, polyesters and  
epoxy resins. Content of (A) is 1-50(5-25)weight%. (B) is water or any mixture  
of water and water-soluble organic solvent(s). (D) are, e.g., PVA,  
polyacrylic acid sodium salt, starch, cellulose derivs. and PEO. Amount of  
(D) is 10-200wt.% of (A). (C) is selected from various water-soluble  
organic and inorganic cpds. having a specific gravity of more than 1.00,  
pref. inorganic salts. A pref. ink compsn. comprises 10-30 pts. weight of  
(A); 0.05-1 pt. weight of surface active agent; 0.01-20 pts. weight of (D);  
10-20 pts. weight of polyol; 0.5-1 pt. weight of chelating agent; 0.1-0.5 pt.  
weight of mildew-proofing agent; 2-30 pts. weight of (C); and 50-200 pts.

weight of  
water.

USE/ADVANTAGE - Excellent printed images are obtd.. This ink compsn.  
has improved stability and so does not clog the nozzles. It forms ink dots  
without bleeding and gives printed images having high concentration, contrast

and  
dissolution and excellent resistance to water and sc

Dwg.0/2

FS CPI GMPI

FA AB

MC CPI: A12-W07D; A12-W07F; G02-A04A; G05-F

L8 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN

AN 1992-185672 JAPIO

TI INK FOR INK JET PRINTER AND ITS FIXATION

IN TSUJIHIRO MASAKI

PA MITA IND CO LTD

PI JP 04185672 A 19920702 Heisei

AI JP 1990-317069 (JP02317069 Heisei) 19901120

PRAI JP 1990-317069 19901120

SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1992

IC ICM C09D011-00

ICS B41J002-01; C09D011-02; C09D011-02

AB PURPOSE: To obtain the title ink which does not blot when applied to

recording paper and excels in the dispersion stability of the contained colored resin particles during storage, etc., by dissolving a water-soluble compound in an aqueous medium so that a difference in the specific gravity between the medium and the particle may be below a specified value.

CONSTITUTION: An ink for an ink jet printer comprising colored resin particles and an aqueous medium in which the particles are dispersible, wherein a water-soluble compound (desirably one having a specific gravity of 1.00 or above, particularly desirably an inorganic salt) is dissolved in the medium so that a difference in the specific gravity between the medium and the particle may be below 0.04. Since the above ink is one in which the colorant is not a conventional water-soluble dye but is the colored resin particles, and these particles are dispersed in the medium, ink dots jetted from the nozzle of an ink jet printer do not blot on recording paper. Since the difference in the specific gravity between the medium and the particle is below 0.04, the dispersion stability of the particles during storage, etc., can be improved, and plugging of an ink jet can be prevented.

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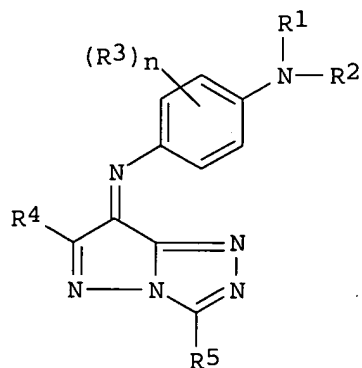
L12 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1997:309775 CAPLUS  
 DN 126:294702  
 ED Entered STN: 15 May 1997  
 TI Water-thinned ink-jet recording fluids providing lightfast color images with good color and dot uniformity  
 IN Onodera, Akira; Ninomya, Hidetaka; Ooya, Hidenobu; Ishibashi, Daisuke  
 PA Konishiroku Photo Ind, Japan  
 SO Jpn. Kokai Tokkyo Koho, 23 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS C09D011-02  
 CC 42-12 (Coatings, Inks, and Related Products)  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09059552	A2	19970304	JP 1995-220486	19950829 <--
PRAI JP 1995-220486		19950829		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 09059552	ICM	C09D011-00
	ICS	C09D011-02

OS MARPAT 126:294702  
 GI



I

AB The title inks contain dyes I (R1, R2 = H, aliphatic group, aromatic group, heterocyclic group; R3 = halogen, alkyl, alkoxy, aryl, aryloxy, acylamino, sulfonylamino, ureido, urethane, alkylthio, arylthio, alkoxycarbonyl, carbamoyl, sulfamoyl, sulfonyl, acyl, amino, sulfo, carboxy; n = 0-3; R4 = aliphatic group, aromatic group, heterocyclic group, alkoxy, aryloxy, alkylthio, arylthio, acylamino, sulfonylamino, ureido, urethane, alkoxycarbonyl, carbamoyl, sulfamoyl, sulfonyl, acyl, amino; R5 = H, aliphatic, aromatic, heterocyclic group, alkoxycarbonyl, carbamoyl, acyl; ≥1 of substituents on R3-5 = ionic hydrophilic group at pH 8-13). An ink comprised I (R1 = Et; R2 = CH<sub>2</sub>CH<sub>2</sub>OH; R3, R4 = Me; n = 1; R5 = CH<sub>2</sub>CH<sub>2</sub>NHCOCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H) 3, diethylene glycol 10, triethylene glycol monobutyl ether 7, propanol 3, and water 77 parts.  
 ST diazotriazole dye jet ink lightfast  
 IT Inks  
 (jet-printing; water-thinned ink-jet recording fluids providing



lightfast color images with good color and dot uniformity)

IT Dyes  
Light-resistant materials  
(water-thinned ink-jet recording fluids providing lightfast color images with good color and dot uniformity)

IT 9008-63-3, Formaldehyde-sodium naphthalenesulfonate copolymer  
106392-12-5, Ethylene oxide-propylene oxide block copolymer  
RL: MOA (Modifier or additive use); USES (Uses)  
(water-thinned ink-jet recording fluids providing lightfast color images with good color and dot uniformity)

IT 158778-95-1 158778-98-4 189029-64-9 189029-65-0 189029-66-1  
189029-67-2 189029-68-3 189029-69-4 189029-70-7 189029-71-8  
189029-72-9 189029-73-0 189029-74-1 189029-75-2 189029-76-3  
189029-77-4 189029-78-5 189029-79-6 189029-80-9 189029-81-0  
189029-83-2 189029-84-3 189029-86-5 189029-87-6 189029-89-8  
189029-90-1 189029-91-2 189029-93-4

RL: TEM (Technical or engineered material use); USES (Uses)  
(water-thinned ink-jet recording fluids providing lightfast color images with good color and dot uniformity)

RN 9008-63-3  
RN 106392-12-5  
RN 158778-95-1  
RN 158778-98-4  
RN 189029-64-9  
RN 189029-65-0  
RN 189029-66-1  
RN 189029-67-2  
RN 189029-68-3  
RN 189029-69-4  
RN 189029-70-7  
RN 189029-71-8  
RN 189029-72-9  
RN 189029-73-0  
RN 189029-74-1  
RN 189029-75-2  
RN 189029-76-3  
RN 189029-77-4  
RN 189029-78-5  
RN 189029-79-6  
RN 189029-80-9  
RN 189029-81-0  
RN 189029-83-2  
RN 189029-84-3  
RN 189029-86-5  
RN 189029-87-6  
RN 189029-89-8  
RN 189029-90-1  
RN 189029-91-2  
RN 189029-93-4

L12 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 1997-209559 [19] WPIX

DNN N1997-172909 DNC C1997-067640

TI Ink-jet recording liquid - contains pyrrolo triazole dye giving excellent colour tone..

DC A97 E23 G02 G05 T04

PA (KONS) KONICA CORP

CYC 1

PI JP 09059552 A 19970304 (199719)\* 23 C09D011-00 <--

ADT JP 09059552 A JP 1995-220486 19950829

PRAI JP 1995-220486 19950829

IC ICM C09D011-00

ICS C09D011-02

AB JP 09059552 A UPAB: 19970512

An ink jet recording liquid (P1) contains dyestuff (A1) of formula (I), where R1 and R2 = each independently a hydrogen atom or aliphatic, aromatic, or heterocyclic gp.; R3 = halogen, alkyl, alkoxy, aryl, aryloxy, acylamino, sulphonylamino, ureido, urethane, alkylthio, arylthio, alkoxycarbonyl, carbamoyl, sulphamoyl, sulphonyl, acyl, amino, sulpho, or carboxyl gp.; n = 0-3; R4 = aliphatic, aromatic, heterocyclic, alkoxy, aryloxy, alkylthio, arylthio, acylamino, sulphonylamino, ureido, urethane, alkoxycarbonyl, carbamoyl, sulphamoyl, sulphonyl, acyl, or amino gp.; R5 = H or aliphatic, aromatic, heterocyclic, alkoxycarbonyl, carbamoyl, or acyl gp. At least one of R3, R4 and R5 is a substit. which works as an ionically hydrophilic gp. in the 8-13 pH range. Also claimed is an ink jet recording liquid (P2) containing dyestuff (A2) of formula (II), where R1 and R2 = as above; R6 = halogen or alkyl, alkoxy, aryl, aryloxy, acylamino, sulphonylamino, ureido, urethane, alkylthio, arylthio, alkoxycarbonyl, carbamoyl, sulphamoyl, sulphonyl acyl or amino gp.; R7 = an aliphatic, aryl, heterocyclic, alkoxy, aryloxy, alkylthio, arylthio, acylamino, sulphonylamino, ureido, urethane, alkoxycarbonyl, carbamoyl, sulphamoyl, sulphonyl, acyl or amino gp.; R8 = an aliphatic, aromatic, heterocyclic, alkoxycarbonyl, carbamoyl, or acyl gp. When both R7 and R8 are aliphatic gps., they have at least 2 C. When R7 is an aromatic gp. and R8 is an aliphatic gp., R8 is an aliphatic gp. containing at least 2C. Also claimed is an ink jet recording liquid (P3) containing dyestuff (A3) of formula (III), where R1 = H or aliphatic, aromatic, or heterocyclic gp.; R6 = a halogen atom or alkyl, alkoxy, aryl, aryloxy, acylamino, sulphonylamino, ureido, urethane, alkylthio, arylthio, alkoxycarbonyl, carbamoyl, sulphamoyl, sulphonyl, acyl or amino gp.; R9 = aliphatic, aromatic, heterocyclic, alkoxy or amino gp.; L = an alkylene gp.; Y = a carbonyl, sulphonyl, oxalyl, or phosphoryl gp.; R10 = an aliphatic, aromatic, heterocyclic, alkoxy, aryloxy, alkylthio, arylthio, acylamino, sulphonylamino, ureido, urethane, alkoxycarbonyl, carbamoyl, sulphamoyl, sulphonyl, acyl or amino gp.; R11 = a hydrogen atom or aliphatic, aromatic, heterocyclic, alkoxycarbonyl, carbamoyl, or acyl gp.

USE - (P1), (P2) or (P3) is suitable as an ink jet recording liquid, partic. with a magenta colour.

ADVANTAGE - Uniform dot shape giving recordings with excellent colour tone, reproducibility, and resistance to light.

Dwg.0/0

FS CPI EPI

FA AB; GI; DCN

MC CPI: A12-W07E; E25-E01; G02-A04A; G02-A04B; G05-F03  
EPI: T04-G02C

L12 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN

AN 1997-059552 JAPIO

TI INK-JET RECORDING SOLUTION

IN ONODERA AKIRA; NINOMIYA HIDETAKA; OYA HIDENOBU; ISHIBASHI DAISUKE

PA KONICA CORP

PI JP 09059552 A 19970304 Heisei

AI JP 1995-220486 (JP07220486 Heisei) 19950829

PRAI JP 1995-220486 19950829

SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1997

IC ICM C09D011-00

ICS C09D011-02

AB PROBLEM TO BE SOLVED: To obtain an ink-jet recording solution containing a coloring matter having a specific structure, excellent light resistance of color image, color tone for improving color reproducibility and shelf stability when made into an aqueous ink, especially providing a clear magenta recorded image.

SOLUTION: This ink-Jet recording solution contains 0.5-10wt.% of a coloring matter of the formula (R<sub>1</sub> and R<sub>2</sub> are each H, an aliphatic group, etc.; R<sub>3</sub> is a halogen, an alkyl, etc.; (n) is 0-3; R<sub>4</sub> is an aliphatic group, an aromatic group, etc.;

R<sub>5</sub> is H, an acyl, etc.; with the proviso that at least one substituent group of R<sub>3</sub> to R<sub>5</sub> is one acting as an ionic hydrophilic group at pH8 to pH13) based on the ink-jet recording solution. An aqueous solvent is preferable as a solvent system used for the objective recording solution. The recording solution has ≤30cps viscosity during flying and 30-80dyne/cm surface tension during flying. When a resin type dispersant is used, a polymer compound having 1,000-1,000,000 molecular weight is preferable and the content of the polymer compound is preferably 0.1-50wt.% in the ink-jet recording solution.  
COPYRIGHT: (C)1997,JPO

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L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:815268 CAPLUS  
 DN 139:314530  
 ED Entered STN: 17 Oct 2003  
 TI **Inkjet** recording method  
 IN Takashima, Masanobu; Yabuki, Yoshiharu  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Eur. Pat. Appl., 100 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM B41M005-00  
 ICS C09D011-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1352754	A2	20031015	EP 2003-7956	20030409
	EP 1352754	A3	20040602		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2003300380	A2	20031021	JP 2002-107031	20020409
	JP 2003305954	A2	20031028	JP 2002-109112	20020411
	JP 2004001385	A2	20040108	JP 2003-18394	20030128
	JP 2004001469	A2	20040108	JP 2003-105162	20030409
	EP 1525995	A1	20050427	EP 2005-1926	20030409
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI	JP 2002-107030	A	20020409		
	JP 2002-107031	A	20020409		
	JP 2002-109112	A	20020411		
	JP 2002-114690	A	20020417		
	JP 2003-18394	A	20030128		
	EP 2003-7956	A3	20030409		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1352754	ICM	B41M005-00
	ICS	C09D011-00
EP 1352754	ECLA	B41M005/00J2; C09D011/00C; C09D011/00C20
JP 2004001385	FTERM	2C056/EA13; 2C056/FC02; 2H086/BA01; 2H086/BA15; 2H086/BA35; 2H086/BA37; 2H086/BA53; 2H086/BA57; 2H086/BA60; 4J039/BC39; 4J039/BC49; 4J039/BC50; 4J039/BC51; 4J039/BC55; 4J039/BC60; 4J039/BC72; 4J039/BC73; 4J039/BC74; 4J039/BC75; 4J039/BC76; 4J039/BC77; 4J039/BC78; 4J039/BC79; 4J039/BE02; 4J039/EA15; 4J039/EA16; 4J039/EA36; 4J039/EA42; 4J039/GA24
JP 2004001469	FTERM	2C056/EA13; 2C056/FC02; 2H086/BA01; 2H086/BA04; 2H086/BA15; 2H086/BA31; 2H086/BA37; 2H086/BA56; 2H086/BA60

AB The present invention relates to an **ink jet** recording method of forming an image on an **ink jet** recording sheet that has, on a support, a colorant-receiving layer which contains at least one inorg. mordant, by using an **ink jet** recording ink set that comprises, as min. constituent elements thereof, a yellow ink which contains at least one yellow dye, a magenta ink which contains at least one magenta dye and a cyan ink which contains at least one cyan dye, wherein an **oxidn. potential** of the magenta dye and an **oxidn. potential** of

the cyan dye are each nobler than 0.8 V (vs SCE).

ST **ink jet** recording cationic polymer

IT **Ink-jet** printing

**Ink-jet** recording sheets

(**ink jet** recording method)

IT Dyes

(**ink jet** recording sheet containing)

IT 5153-24-2, Zirconyl acetate

RL: TEM (Technical or engineered material use); USES (Uses)

(Zircosol ZA 30; **ink jet** recording sheet colorant

receiving layer containing)

IT 9017-80-5 26062-79-3, Shallol DC 902P 28214-37-1 32698-04-7, PAS-A 1

34031-59-9 60559-07-1 90216-73-2

RL: TEM (Technical or engineered material use); USES (Uses)

(cationic polymer; **ink jet** recording sheet colorant

receiving layer containing)

IT 7631-86-9, Reolosil QS 30, uses 9002-89-5, PVA 124 32168-43-7, Adeka

Catioace PD 50 177646-18-3, PVA 235

RL: TEM (Technical or engineered material use); USES (Uses)

(**ink jet** recording sheet colorant receiving layer

containing)

IT 10099-59-9, Lanthanum nitrate 12042-91-0, Aluminum chloride hydroxide

(Al<sub>2</sub>Cl(OH)<sub>5</sub>) 14814-02-9, Titanium lactate 18428-88-1, Zircosol ZC 2

26161-33-1, Shallol DM 283P

RL: TEM (Technical or engineered material use); USES (Uses)

(inorg. **particle**; **ink jet** recording sheet

colorant receiving layer containing)

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